

WHAT IS CLAIMED IS:

1. An image forming method comprising the steps of:

superposing an image receiving sheet containing an image receiving layer and a heat transfer sheet containing a substrate, a light-heat conversion layer and an image forming layer on each other with the image forming layer of the heat transfer sheet facing the image receiving layer of the image receiving sheet; and

imagewise irradiating the superposed heat transfer sheet with laser light to cause the irradiated area of the image forming layer to be transferred to the image receiving layer, wherein

the image forming layer shows a deformation of 110% or more as observed under a transmission electron microscope upon being irradiated with a laser beam, the deformation being represented by equation:

$$\text{Deformation (\%)} = [(a+b)/b] \times 100$$

wherein a represents an increase of a cross-sectional area of an irradiated part of the image forming layer; and b represents a cross-sectional area of that part of the image forming layer before irradiation.

2. The image forming method according to claim 1, wherein the light-heat conversion layer generates gas on being irradiated with a laser beam thereby to push and transfer the

irradiated area of the image forming layer to the image receiving sheet in a form of a thin film.

3. The image forming method according to claim 1, wherein  
5 a recording area of the heat transfer sheet is 515 mm by 728 mm or larger.

4. An image forming material comprising the heat transfer sheet and the image receiving sheet according to claim  
10 1, only the image forming layer being adapted to be deformed on being irradiated with a laser beam to form a transfer image.

5. The image forming material according to claim 4, a gas pressure is applied to the image forming layer to form a  
15 transfer image.

6. The image forming material according to claim 5, wherein the gas pressure is caused by evaporation of a solvent or a water content of the light-heat conversion layer.  
20

7. The image forming material according to claim 5, wherein the light-heat conversion layer undergoes no cohesive failure nor outward deformation by the gas pressure.

25 8. The image forming material according to claims 4,

wherein the light-heat conversion layer comprises a polyamide-imide resin in a proportion of at least 30% by weight, based on a total binder contained in the light-heat conversion layer.

5

9. The image forming material according to claims 4, which comprises at least four heat transfer sheets according to claim 1 different in color, and the image forming layer of each of the heat transfer sheets has a thickness of 0.01 to 0.9  $\mu\text{m}$ .

10

10. The image forming material according to claim 9, wherein the at least four heat transfer sheets include a yellow, a magenta, a cyan, and a black heat transfer sheet.

15

11. The image forming material according to claim 10, wherein a thickness of a black image forming layer in the black heat transfer sheet is larger than that of yellow, magenta and cyan image forming layers of the yellow, magenta and cyan heat transfer sheets and ranges from 0.5 to 0.7  $\mu\text{m}$ .

20

12. The image forming material according to claim 11, wherein the thickness of a black image forming layer in the black heat transfer sheet ranges from 0.55 to 0.65  $\mu\text{m}$ .

25

13. The image forming material according to claim 11,  
wherein the thickness of a black image forming layer in the  
black heat transfer sheet is 0.60  $\mu\text{m}$ .

5           14. The image forming material according to claim 10,  
wherein a thickness of a black image forming layer in the black  
heat transfer sheet ranges from 0.5 to 0.7  $\mu\text{m}$ , and a thickness  
of yellow, magenta and cyan image forming layers of the yellow,  
magenta and cyan heat transfer sheets each ranges from 0.2 to  
10 less than 0.5  $\mu\text{m}$ .

15           15. The image forming material according to claim 14,  
wherein the thickness of yellow, magenta and cyan image forming  
layers of the yellow, magenta and cyan heat transfer sheets  
each ranges from 0.3 to 0.45  $\mu\text{m}$ .